

Surface Mount Power Splitter/Combiner

2 Way-0° 50Ω

10 to 1000 MHz

LRPS-2-4+
LRPS-2-4



CASE STYLE: QQQ130
PRICE: \$19.95 ea. QTY(10-49)

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input (as a splitter)	1W max.
Internal Dissipation	0.125W max.

Pin Connections

SUM PORT	6
PORT 1	4
PORT 2	3
GROUND	1
NOT USED	2,5

Features

- low insertion loss, 0.4 dB typ.
- good isolation, 23 dB typ.

Applications

- cellular
- communication systems
- instrumentation

+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

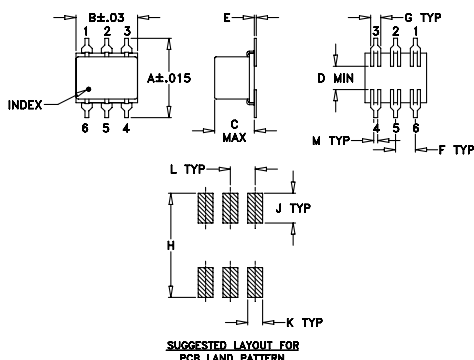
The + suffix identifies RoHS Compliance. See our web site
for RoHS Compliance methodologies and qualifications.

Splitter Electrical Specifications

FREQ. RANGE (MHz)	ISOLATION (dB)						INSERTION LOSS (dB) ABOVE 3.0 dB						PHASE UNBALANCE (Degrees)			AMPLITUDE UNBALANCE (dB)		
	L		M		U		L		M		U		L	M	U	L	M	U
	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
f _L -f _U	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Max.	Typ.	Max.	Typ.	Max.	Max.	Max.	Max.	Max.	Max.	Max.
10-1000	25	20	23	16	19	14	0.3	0.5	0.4	0.9	0.8	1.5	1.0	3.0	5.0	0.15	0.2	0.4

L=10-100 MHz M=100-500 MHz U=500-1000 MHz

Outline Drawing

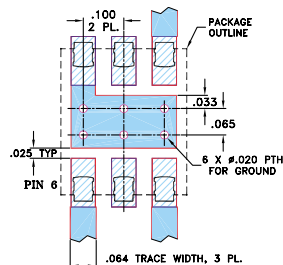


Outline Dimensions (inch mm)

A	B	C	D	E	F	G
.400	.31	.200	.10	.010	.100	.050
10.16	7.87	5.08	2.54	0.25	2.54	1.27

H	J	K	L	M	wt
.420	.120	.060	.100	.020	grams
10.67	3.05	1.52	2.54	0.51	0.55

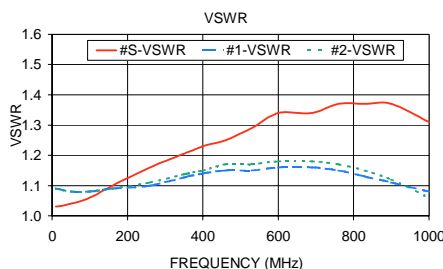
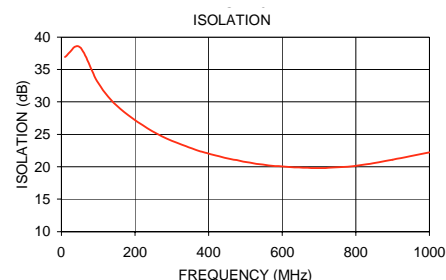
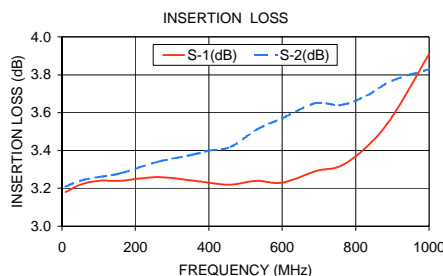
Demo Board MCL P/N: TB-94 Suggested PCB Layout (PL-236)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" ± .002", COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Typical Performance Data

Frequency (MHz)	Insertion Loss (dB) S-1	Insertion Loss (dB) S-2	Amplitude Unbalance (dB)	Isolation (dB)	Phase Unbalance (deg.)	VSWR S	VSWR 1	VSWR 2
10.00	3.18	3.21	0.03	36.91	0.01	1.03	1.09	1.09
50.00	3.22	3.24	0.02	38.44	0.08	1.04	1.08	1.08
100.00	3.24	3.26	0.02	32.93	0.37	1.06	1.08	1.08
160.00	3.24	3.28	0.04	28.93	0.48	1.10	1.09	1.09
260.00	3.26	3.34	0.09	25.09	0.87	1.16	1.10	1.11
360.00	3.24	3.38	0.15	22.71	1.18	1.21	1.13	1.14
400.00	3.23	3.40	0.17	22.03	1.29	1.23	1.14	1.15
460.00	3.22	3.42	0.20	21.20	1.40	1.25	1.15	1.17
530.00	3.24	3.51	0.27	20.46	1.59	1.29	1.15	1.17
600.00	3.23	3.57	0.34	20.05	1.58	1.34	1.16	1.18
690.00	3.29	3.65	0.36	19.82	1.77	1.34	1.16	1.18
760.00	3.32	3.64	0.32	19.94	1.80	1.37	1.15	1.17
830.00	3.42	3.69	0.27	20.38	1.72	1.37	1.13	1.15
900.00	3.58	3.77	0.19	21.11	1.66	1.37	1.11	1.12
1000.00	3.91	3.83	0.08	22.19	1.29	1.31	1.08	1.06



electrical schematic

